Tropical migrants return to Bay Area breeding grounds

LLNL's wild side

By Jennifer Garrison

Have you noticed any new bird songs or seen a flash of color outside your window in the morning lately? Spring marks the arrival of a whole new batch of birds in the Tri-Valley area.

Many birds spend their winters in Mexico or Central and South America. When North America warms up, these birds return here to breed. Some of these birds will take up residence in the Bay Area, while others merely pass through on their way north. Because of their habit of returning to the tropics every year, these birds are referred to as neotropical migrants. Some of the new arrivals, such as the MacGillivray's Warbler *(Oporornis tolmiei)* are secretive and hard to spot, while others, such as the Lazuli bunting *(Passerina amoena)* and Western tanager *(Piranga ludoviciana)* are surprisingly colorful.

Spring also marks the time of year when LLNL wildlife biologists begin to arrive at Site 300 before dawn to record both new avian arrivals and faithful year-round residents. Every other week, LLNL biologists and trained volunteers set up mistnets at Site 300 to conduct an ongoing study of bird populations. These 42-foot-long nets are stretched between two poles about three feet above the ground. Birds cannot see the black web-like mesh, fly into the nets, and gently fall into a net pocket; biologists then remove these birds unharmed.

Mistnetting occurs in the morning hours, when birds are most active, and continues until around noon. Mistnets are used because they allow an up-close view of the bird. This is important because close inspection of bird feather molt, coloration and wear is often the only way to determine sex and age.

PHOTO © 1999 DON GETTY

MICHAEL VAN HATTEM

MICHAEL VAN HATTEM

Birds in the area include the Lazuli bunting, top left, which is shown at the Elk Ravine banding station at Site 300. Another recent arrival is the Western tanager, center. Top right, the Common Yellowthroat has flown into a mistnet, which allows for an up-close view of birds without harming them. Lower right, Laboratory biologists inspect a Willow Flycatcher at the Site 300 bird banding station.

The Site 300 study was started in 2000 by Lab wildlife biologist Michael van Hattem, who leads the program every spring. At the banding station, characteristics of each bird are recorded, including species, age, sex, health, reproductive status and location. A tiny and light metal band, stamped with an individual number provided by the U.S. Geological Survey's Bird Banding Laboratory (BBL), is carefully put on one of the bird's legs. This band, which does not harm the bird, allows biologists to track birds' movements over time, if the banded bird is found again in a mistnet at Site 300 or elsewhere. The newly banded birds are then released and fly back into the trees and grasslands of Site 300.

This program allows LLNL biologists to determine the diversity of birds at Site 300, identify which birds reside here year-round and which just pass through on their annual migratory flights. Such information enables LLNL to protect sensitive species and plan projects accordingly, lowering the overall environmental and economic impact.

The Site 300 banding station is part of a large nationwide study called the Monitoring Avian Productivity and Survivorship (MAPS) Program (http:// www.birdpop.org/maps.htm).

MAPS, run by the Institute for Bird Populations in Point Reyes, compiles information on bird species distribution, abundance and breeding status nationwide to better enable us to understand our nation's bird diversity and distribution, and to recognize declining species so they may be protected before they are threatened with extinction.

The Lab runs the only banding station in the Altamont region and thus provides much-needed information on bird diversity in the area. The Lab banding station, along with several sitewide visual bird surveys, has revealed that there are more than 120 bird species living in or passing through Site 300. Several species previously unknown in the region (such as the Willow Flycatcher) have been caught during these mistnetting sessions, providing much-needed information on the distribution of these rare species.